Network Models

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Active Travel to School









sus**trans**

Wales-wide, 44% of pupils travel actively to primary school and 34% to secondary school

Sustrans' Welsh Government funded schools project





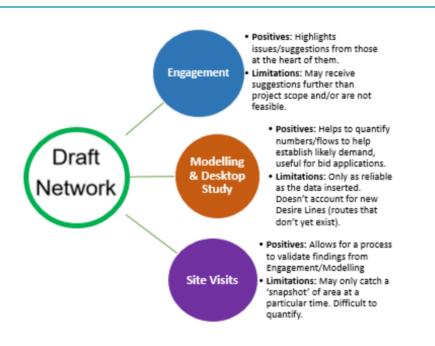
Active travel guidance

5.5.6 The network of routes should be **ambitious** aiming to connect people to all key destinations which **must** include all current and planned schools.









"Engagement and consultation in the planning of the networks is a key requirement of the Act."

Active Travel Guidance

"Networks should be based on evidence of travel demand."

Active Travel Guidance

At this stage, the audit is primarily concerned with identifying the nature of the issue and likely feasibility or scale of works required to meet the Active Travel design standard.

Active Travel Guidance



Active travel guidance

13.6.1 Local authorities may choose to try to create an area wide local network, or to focus initially on serving key areas (such as links to a town centre) or types of journeys, such as travel to school.

		Destination Points				Other
Priority	Length of Route	Schools	Key Employment Sites	Bus/Train Stations	Leisure/ Tourism Facilities	Destinations e.g. Local Chemist
High Walking & Cycling	Under 2.5 miles	Ø	Ø	(
High to Medium Walking & Cycling	Between 2.5 - 5 miles	Ø	Ø	(
Medium Walking & Cycling	Under 2.5 miles				(⊘
Medium to Low Walking & Cycling	Between 2.5 - 5 miles				()	Ø

Travel to school in Monmouthshire



Currently



50% walk to school



Less than 1% cycling



22% travel via car



28% on the bus

'How would you like to travel to school' 63% cited that they would like to walk, cycle or scoot more often



Independence on the journey to school

Safety



Currently

48% of Secondary pupils currently citing that they feel '**very safe**' whilst walking – only 13% as 'very safe' whilst cycling.

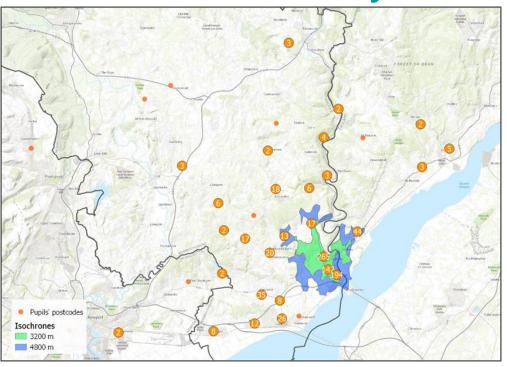
- fear of road danger including traffic speeds, traffic volumes
- missing pavements/lack of cycling infrastructure
- inadequate infrastructure



Cycling infrastructure is often missing or poor

Monmouthshire County Council





Chepstow School secondary

77% of pupils live within 3 miles of the school.

Learner Travel (Wales)
Measure - only secondary
pupils living more than 3
miles from the school receive
free transportation from the
local authority

Active Travel Modelling



Spatial Design Network Analysis (SDNA) from Cardiff University's Crispin Cooper and Alain Chiaradia used to show potential for active travel given current levels of traffic.

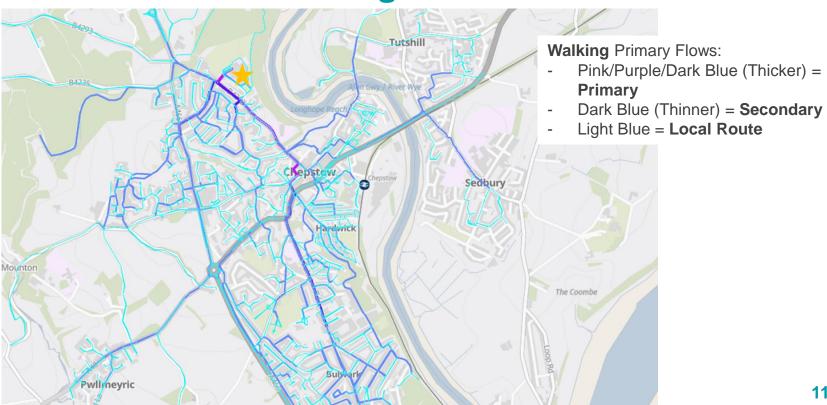
Post code data of pupils used to model potential for walking and cycling flows to school by walking and cycling.



Where best to create active travel routes?

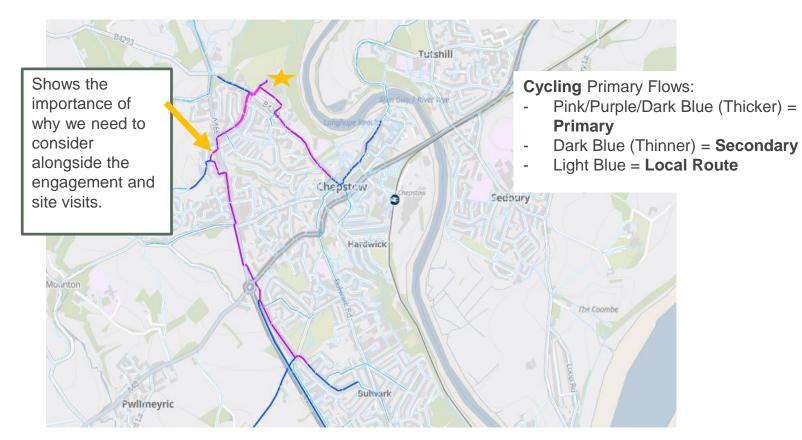
Potential flows: walking





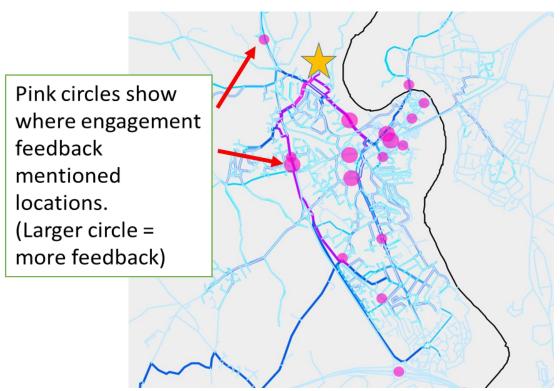
Potential flows : cycling



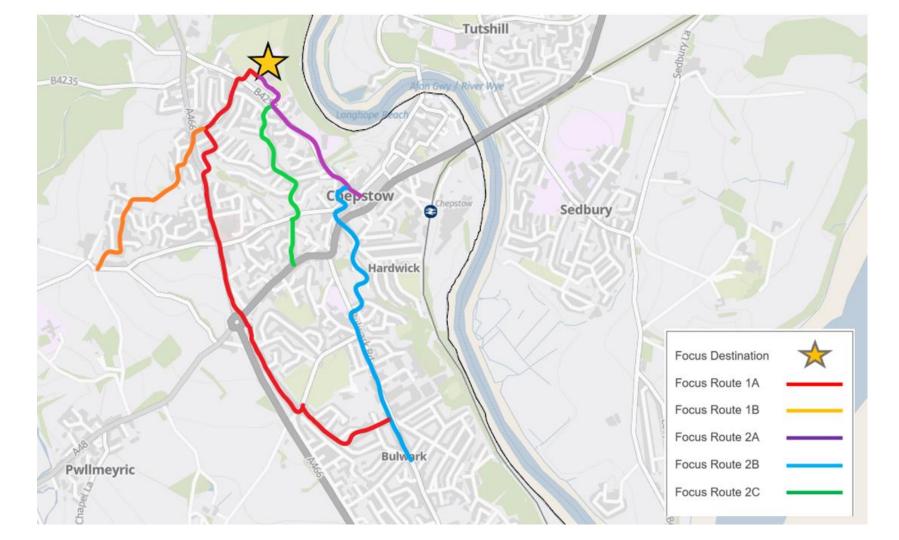


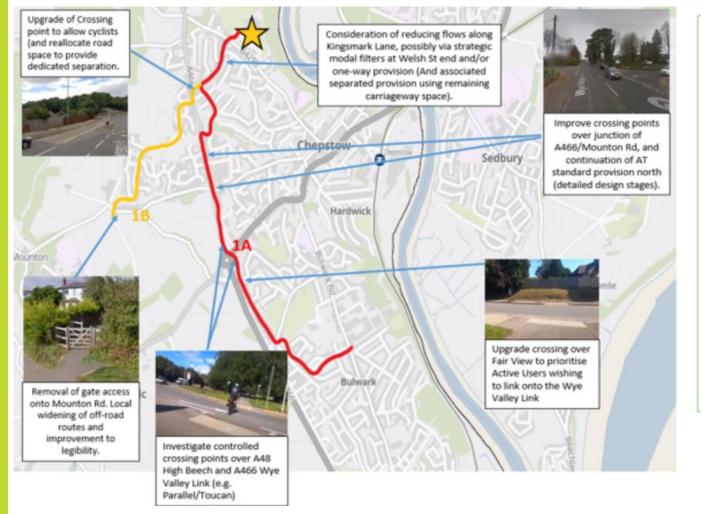
Potential flows and engagement findings





From this, two broad priority alignments are considered for walking and cycling (schools focus)





Improvement Ideas
Suggested via
Engagement/Site Visit
findings for consideration
along alignment focus.

Note: These are purely indicative, and would require further study at the detailed design stages.

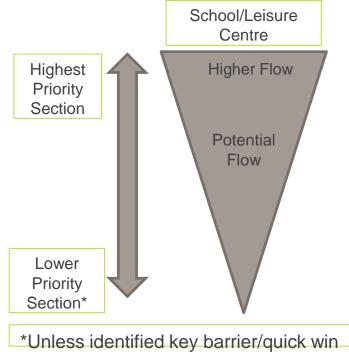
It may be found at detailed design that improvements along this exact alignment are not deliverable, in which case alternative alignments (as close as possible to the modelled flow) would then be explored in further detail.

Building a 'green' school?



For developers and local authorities, key to focus on improvements nearest a school (or any other destination) first.





Summary



- Model to create a network based on evidence
- Use engagement feedback and site visits to 'check'
- Focus initial improvements near the school (or other destination) where they benefit most users.



Sustrans yw'r elusen sy'n ei gwneud yn haws i bobl gerdded a beicio.

Rydym yn cysylltu pobl a llefydd, yn creu cymunedau byw, yn trawsnewid y daith i'r ysgol ac yn hwyluso taith hapusach ac iachach i'r gwaith.

Ymunwch â ni ar ein siwrne.

Sustrans is the charity making it easier for people to walk and cycle.

We connect people and places, create liveable neighbourhoods, transform the school run and deliver a happier, healthier commute.

Join us on our journey.

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